

5 Lakes Energy 115 W Allegan St, Suite 710 Lansing, MI 48933

Vectren South

For this analysis, we model potential outage scenarios for a customer operating his/her own generating equipment. We assume the customer's equipment has a rated capacity of 2 MW.¹ This customer takes backup, auxiliary, and maintenance power under Rate BAMP (Sheet No. 19). This rate is open to any non-residential customer with a capacity requirement of 1,000 kW or more who owns and operates electric generating equipment, other than for emergency use. Rate BAMP's rates are unbundled between generation, transmission, and distribution and offers firm and non-firm generation services. Our customer elects for firm generation service. Transmission and distribution services are only offered as firm.

Maintenance power is capacity and energy provided by Company to replace capacity and energy normally generated by Customer's generating equipment during a scheduled outage. Outages must be scheduled at least 14 days in advance and charges are generally those contained in rate LP (Large Power Service). Backup power is provided at a separate rate and available for a maximum of 60 days in any contract year.

Summary

No Outage: \$21,832.00

Scheduled 16 Hours Off-peak: \$22,124.00

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Scheduled 8 Hours On-peak, 8 Hours Off-peak: \$22,124.00

Scheduled 32 Hours On-peak: \$24,148.00

Unscheduled, 8 Hours On-peak, 8 Hours Off-peak: \$23,856.00

No Outage

In a month in which the customer takes no backup or maintenance service, there is no indication as to whether he/she is responsible for capacity payments or a reservation fee. If the customer pays for capacity based on the billing demand provision of Rate BAMP, he or she may be responsible for paying demand charges on 100% of the contracted standby demand.

• Service Charge: \$100.00/month

• Firm Backup Charge: \$6.21/kW * 2,000 kW = \$12,420.00

¹ This assumption simplifies the analysis so that demand and other charges measured in kVA will be assumed to apply to the kW rating of our hypothetical customer.

CSP Capacity Rate: \$4.66/kW * 2,000 kW = \$9,312.00

Total monthly charges would be \$21,832.00.

Scheduled 16 Hours Off-peak

In this outage scenario, the customer schedules a maintenance outage lasting 16 hours during off-peak times. On-peak periods for Vectren South are from 7:00am-8:00pm, Monday-Friday, therefore this outage would have to take place over the course of two days. Assuming this outage was scheduled at least 14 days in advance, it would be billed as Maintenance Power. Billing demand would be the full 2,000 kW and the customer would use 32,000 kWh of energy. The customer would face the following charges:

• Service Charge: \$100.00/month

Demand Charge: \$10.00/kW * 2,000 kW = \$20,000.00

Energy Charge: \$0.02095/kWh * 32,000 kWh = \$670.40

• Fuel Charge: \$0.0377/kWh * 32,000 kWh = \$1,206.40

Variable Production Charge: \$0.00460/kWh * 32,000 kWh = \$147.20

Total monthly charges would be \$22,124.00

Scheduled 16 Hours On-peak

This scenario would take place over two days during on-peak hours.

• Service Charge: \$100.00/month

Demand Charge: \$10.00/kW * 2,000 kW = \$20,000.00

Energy Charge: \$0.02095/kWh * 32,000 kWh = \$670.40

• Fuel Charge: \$0.0377/kWh * 32,000 kWh = \$1,206.40

Variable Production Charge: \$0.00460/kWh * 32,000 kWh = \$147.20

Total monthly charges would be \$22,124.00

Scheduled 8 Hours On-peak, 8 Hours Off-peak

This scenario would take place over one day. The charges are identical to the scenario above.

• Service Charge: \$100.00/month

Demand Charge: \$10.00/kW * 2,000 kW = \$20,000.00

Energy Charge: \$0.02095/kWh * 32,000 kWh = \$670.40

Fuel Charge: \$0.0377/kWh * 32,000 kWh = \$1,206.40

Variable Production Charge: \$0.00460/kWh * 32,000 kWh = \$147.20

Total monthly charges would be \$22,124.00

Scheduled 32 hours On-peak

In this scenario, the customer uses 480,000 kWh of energy.

Service Charge: \$100.00/month

Demand Charge: \$10.00/kW * 2,000 kW = \$20,000.00

• Energy Charge: \$0.02095/kWh * 32,000 kWh = \$1,340.80

Fuel Charge: \$0.0377/kWh * 32,000 kWh = \$2,412.80

Variable Production Charge: \$0.00460/kWh * 32,000 kWh = \$294.40

Total monthly charges would be \$24,148.00

Unscheduled 8 Hours On-peak, 8 Hours Off-peak

This scenario would take place over one day. Under Rate BAMP, an unscheduled outage is considered backup power and billed differently than maintenance power. The demand charge for backup power consists of \$6.21/kVA which is the transmission and distribution component of the rate LP demand charge, plus 120% of the capacity component of the current Rate CSP (Cogeneration and Small Power Production). For 2018, the CSP capacity payment will be \$3.88/kVA. Energy charges are billed as 100% of the Company's incremental energy costs, inclusive of any variable production charges. This amount is not specified in the tariff so the analysis will assume the same energy charges as used for maintenance power.

• Service Charge: \$100.00/month

Backup Power: \$6.21/kW * 2,000 kW = \$12,420.00

Rate CSP Capacity Charge: \$3.88 * 120% * 2,000 kW = \$9,312.00

Energy Charge: \$0.02095/kWh * 32,000 kWh = \$670.40

• Fuel Charge: \$0.0377/kWh * 32,000 kWh = \$1,206.40

Variable Production Charge: \$0.00460/kWh * 32,000 kWh = \$147.20

Total monthly charges would be \$23,856.00